tory of sudden sharp pain or shock; he had simply grown worse in the last forty-eight hours. On examination we found rigidity of the muscles over the epigastrium, and Dr. Rixford and I were not quite sure whether it was a case of acute pancreatitis or whether there was perforation of a duodenal ulcer. On operation we found perforation of the duodenum with extra-sation of gastric contents all over the abdomen. This patient recovered.

Doctor J. Wilson Shiels: I find that a great number of men allow these cases to continue so long that the surgeons can do no good at all. If ulcer is diagnosed it would be wise to call in a surgical consultant, just as one should be in the habit of keeping in touch with a surgeon during a patient's third stage in typhoid. The physician should not wait until the stomach has lost its function before consulting the surgeon.

Doctor Chas. G. Levison: I am very glad to hear Doctor Cheney express himself as he has done concerning this subject, and I think it shows the result of his intimate association with surgeons. Medical men are apt to treat these cases as intestinal dyspepsia, neurasthenia, etc., which surgeons as the Mayos and Moynihan have shown to be organic. The surgeons have been a long time educating the medical man to favor operations upon the appendix, and now a physician is more apt to advise operation than the surgeon; frequently at consultation, operation is more strongly advised by the physician. Doctor Schmoll has referred to the acute ulcers, but these conditions are not those which have been discussed this evening. It is well known that many acute gastric and duodenal ulcers heal under treatment or even spontaneously. When these cases recur after a period of rest of six months or a year, they are not apt to disappear entirely. A marked characteristic of a chronic duodenal ulcer is its periodicity and the interval during which time the patient is free from symptoms. I have now three patients who undoubtedly have duodenal ulcer. One is getting ready for operation after several years of observation; during this period the patient has never been free from symptoms. This is the class of cases that does not get well under diet. They do not often pass into the hands of the surgeon and eventually develop carcinoma, where naturally the prognosis is exceedingly grave even when the patient is operated upon. There is only one thing that can influence the prognosis in carcinoma, and that is to operate before metaplasia has taken place, for it has been shown that between 50% and 60% of gastric carcinomata give a history of gastric ulcer. On the other hand, duodenal ulcers are not prone to develop into carcinoma, but are more frequently complicated with hemorrhage and perforation. The opinion is general now that no operations should be performed upon the stomach where an indurated base to the ulcer is not present, and that an ulcer for operation should be visible to an onlooker six or eight feet from the operating table. There is no reason for performing a gastro-enterostomy unless obstructive signs are present, and if it is done where no stenosis is demontrable, nothing is accomplished, for the anatomic opening will close and the pylorus will functionate as before.

DEMONSTRATION OF A SPLEEN.*

By WM. FLETCHER McNUTT, M. D.

Mr. M., age 46, miner by occupation, resident of Nome, Alaska, for the last seven years. He complained of a large tumor in the splenic region which he had noticed for a year and a half, frequent attacks of indigestion and vomiting, and great dyspnea. History negative, never had malaria, syphilis, typhoid, nor had he been a resident of the tropics. Six years ago he had a fall and sustained a severe blow in the splenic region. Has been an alcoholic all his adult life. Examination showed an enlarged spleen filling the left side of abdomen and extending to crest of ileum. Heart action irregular, apex displaced upward and to the left, lung normal, kidneys and liver negative, blood red cells slightly diminished, and no leucocytosis. Operation, abdomen opened over spleen, which was found to be firmly adherent over the entire surface. Breaking up these adhesions caused great hemorrhage and profound shock, which continued throughout the operation. Adhesions broken up, spleen removed, and hemorrhage controlled by packing. Patient was returned to bed in condition of shock. Lived six hours. Weight of the spleen when removed was twelve and a half pounds.

* Read before the regular meeting of the San Francisco County Medical Society, April 13, 1909.

Discussion.

Doctor J. W. Shiels: It may be of some interest for me to mention a case of splenectomy which ended fatally within twelve hours after operation. This particular case came to my office, telling me that his wife had told him that he was sick, that his wife had told him that he perspired, that his wife told him that he was breathless, and that he had dyspnea. He had found nothing to account for all these symptoms and he went on working, but because of continued urging of the wife he came to the city and here discovered that he was suffering from bleeding hemorrhoids. Upon examination we found the blood pressure somewhat high, a very large spleen, much larger after operation than even the physical signs indicated. Upon palpation the spleen was extremely free and moving with respiration quite easily, and did not seem to distend very low, the border being above the umbilicus. But upon operation we found the spleen to be enormous, as though most of its growth had been thrown up rather than descending, although from any movement during operation it was evident there were an enormous number of adhesions. The cause of death was probably due to collapse and hemorrhage. Returning to the clinical history, the spleen was extremely large, did not show any cachexia, the liver was very large, so large indeed that we hesitated in giving a diagnosis of Banti's disease; the blood count showed large lymphocytes, but a very small blood count of leucopenia. The man progressively got worse, the heart was in good shape, he showed great discomfort from the large spleen, suffered from all forms of movement severe acute pain. He was under large doses of arsenic. We put him through a long course of mercurial treatment without any result; we did all we could to get him into a better state of health. At the end of all this we confronted him with the alternative, operation. We removed one or two glands to ascertain whether he had Hodgkin's disease; having excluded that and having excluded syphilis, and having no reason to believe the man in any sense tubercular, we gave him the alternative of operation. The operation was performed, but he lived only a few hours.

Doctor H. D'Arcy Power: In the matter of diagnosis it is interesting to note that the position of the spleen varies quite frequently in these cases. I have seen two or three cases within the last two or three years; one was an enormous spleen. There was a typical splenic notch on the right side, although the spleen itself was far down toward the pelvic cavity; that case was not difficult to diagnose. A few months ago I saw a case with Doctor Morton which was interesting and to some extent puzzling. Here the whole cavity was filled with a tumor that had steadily grown for seven or eight months. The diagnosis had been made by someone of sarcoma of the kidney. The splenic notch was palpable on the right side across the mid line and down in the pelvic region. I do not know the result of the exam-

ination of the specimen, because I have not seen it since. The spleen was successfully removed.

Doctor Chas. G. Levison: I am sorry that not more has been said with reference to the diagnosis of this condition. Death following splenectomy performed for splenic anemia is frequently the result of a post-operative thrombosis of the mesenteric vessels. It seems to me that thromboses are more apt to occur in splenectomies performed for these conditions than following any other operation. In several splenectomies performed in this city, death was caused by a thrombosis of the mesenteric vessels. In a splenectomy that I performed the patient developed a thrombosis of the right innominate vein which was removed at an operation performed to remedy the condition. The patient subsequently recovered, not having suffered from the effects of the splenectomy, but the thrombosis nearly cost him his life. As far as the diagnosis of splenic tumor is concerned, I can recall one case of a Grawitz tumor where I made the diagnosis of a splcen. This diagnosis was made because of the fact that the tumor was transversed at its lower border by the transverse colon, and as we are led to believe that the colon is always in front of the kidney, I diagnosed the growth as a splenic tumor. At the autopsy the tumor was found to be an adrenal growth which had grown downwards in front of the kidney and had pushed the transverse colon below. Another tumor of interest from a diagnostic point of view was seen by me recently and was seen by a number of gentlemen none of whom were able to make a correct diagnosis. The tumor occupied the position of the spleen, but it was not closely applied to the ribs, as is always the case with splenic tumors; a notch could be felt, however. Its relation to the ribs made me hesitate to call the tumor spleen. At the autopsy a sarcoma of an undescended testicle was found.

Dr. Wm. Fitch Cheney: I would like to know a little more about the indications for operation in this case. Even admitting that we have definitely made up our minds that the tumor is an enlarged spleen, with evidences as to the nature of the splenomegaly, we do not advise operation in every case, and even when we do we try every other measure first, because the mortality is so high. We generally prefer to let a man live as long as he can without surgery. I would like to know the indications for removal in this case.

PULMONARY TUBERCULOSIS AS AFFECTED BY CERTAIN OTHER DISEASES.*

By JOHN C. KING, M. D., Banning.

While observing some thousands of cases of consumption, I have become interested in noting the apparent effect of other diseases on the pulmonary condition. The complications of tuberculosis are apt to be tubercular. Thus in connection with pre-existing pulmonary tuberculosis we find metastatic affections of other organs, typified by meningitis, pleuritis, orchitis, cold abscesses, etc. They are merely extensions of the original disease and have little or no effect upon the parent, except as they assist in destroying vital resistance. Even in the rare event of their origin from independent infection their influence over the course of the lung disease is negligible. However, this paper will not consider metastases.

Any disease may attack the victim of pulmonary tuberculosis and the question arises whether mutual reaction between diseases may occur. Our medical fathers were fond of tracing antagonisms between diseases; for instance, some of them claimed that consumption and cancer were mutually exclusive. Coley's treatment of inoperable sarcoma is a modern example. We shall not discuss the basis of these supposed antagonisms because, in most cases, the fact of their existence remains in doubt. However, we are persuaded that one disease may influence the clinical history and prognosis of another.

I have seen many cases of co-existing consumption and typhoid fever, cases from the Imperial and Coachella Valleys and from Banning. Advanced tubercular patients do not seem to easily acquire typhoid but many in the second stage do. The course of the fever seems influenced by the chest trouble. On the other hand, in every case observed by me, the pulmonary disease has gradually improved and the improvement has continued to final cure—or is so continuing (for I do not call a case of pulmonary tuberculosis "cured" until after it has remained well three years). I am not familiar with an adequate explanation of this phenomenon—simply present the facts as they have occurred in my practice. At least four of these patients were in bad condition when attacked by typhoid.

My tubercular friends have finished a fair percentage of cases of gonorrhoea. Even in otherwise well people I feel somewhat incompetent to cope with the gonococcus. In patients suffering from pulmonary tuberculosis the effort is still more discouraging. The discharge continues indefinitely or, if it clears up, recurs again and again. The mucous membrane seems especially prepared to become the abode of the germ. Acute inflammatory complications, as orchitis, are not apt to occur. The disease seems chronic and sluggish from the start. However, the point is how, if at all, does gonorrhoea affect the pulmonary conditions? All my patients have suffered from decided aggravation of pulmonary symptoms. I can recall three young men who had been doing remarkably well and who, after gonorrhoea, rapidly failed and died. This result, while not so precipitous as in the three cases referred to, has been quite constant in my experience. I have learned to look upon the acquirement of a clap as a greater misfortune to a consumptive than to others.

On the other hand, syphilis does not seem to possess such an unfortunate influence. Of course, we may find deposits of gummata in the lung, may find them co-existent with tubercular deposit. Gumma of the lung may even simulate tuberculosis. Still, tubercular syphilitics frequently recover from tuberculosis, especially when syphilitic treatment is persistently followed. It does not seem to me that syphilis when recognized and cared for, very much affects the prognosis of pulmonary tuberculosis, apart from the general anaemia and depression incident to syphilitic disease. Venereal infection is so extremely common that many, of both sexes, exhibit the complication. And yet, I do not remember having read any discussion of the effect of venereal dis-

* Read at the Thirty-Ninth Annual Meeting of the State Society, San Jose, April, 1909.